

REMARKS

This application pertains to a novel pressure-sensitive adhesive for single- or double-sided adhesive film strips that are redetachable without residue or destruction by extensive stretching.

Claims 1 - 11 are pending.

The claims have been amended to more specifically recite a pressure-sensitive adhesive. Support can be found throughout the specification, wherein the adhesive is consistently referred to as a PSA. See, for example, page 4, line 23; page 7, line 26; page 8, lines 27, 28, and 30 and page 9, lines 11 and 21.

The claims have also been amended to provide that no acrylate polymers are included in the adhesive. Support for this can be found in Example 1, where the composition of Applicants' adhesives is exemplified, and it can be seen that no acrylates are included. Although there is no other literal support for this exclusion in the specification, other than the absence of acrylate polymers from the formulation given in Inventive Example 1, this Example clearly conveys to those having ordinary skill in the art that Applicants had possession of the concept of a chelate-crosslinked pressure-sensitive adhesive formulation which does not contain any acrylates, and therefore provides the support required by 35 U.S.C. 112, first paragraph. See *Ex parte Parks*, 30 USPQ2d 1234 (Bd. Pat. App. & Int. 1993).

No new matter is added.

In the Advisory Action dated 03/10/2010 the Examiner refers to MPEP 2173.05(i) as stating that "(T)he mere absence of a positive recitation is not basis for an exclusion." The Examiner contends that the mere fact that the composition of an inventive example does not contain an acrylate-containing polymer does not provide the support needed under 35 U.S.C. 112, 1st paragraph for a limitation excluding such polymers from the claimed invention.

It appears that the Examiner may not have read the whole of MPEP 2173.05(i). The penultimate sentence of that section reads as follows:

Note that a lack of literal basis in the specification for a negative limitation may not be sufficient to establish a *prima facie* case for lack of descriptive support. *Ex parte Parks*, 30 USPQ2d 1234, 1236 (Bd. Pat. App. & Inter. 1993).

A copy of *Ex parte Parks* is attached hereto.

In *Ex parte Parks*, the Board of Appeals found that adequate description under the first paragraph of 35 U.S.C. 112 does not require literal support for the claimed invention. Rather, it is sufficient if the originally-filed disclosure would have conveyed to one having ordinary skill in the art that an appellant had possession of the concept of what is claimed.

Applicants' Example 1 does not contain any acrylates and therefore clearly

demonstrates that Applicants had possession of the concept of a chelate-crosslinked pressure-sensitive adhesive formulation which does not contain any acrylates.

Claims 1-11 stand rejected under 35 U.S.C. 103(a) as obvious over Groves US 5,623,010 in view of supporting evidence provided by TYZOR Technical Bulletin K-17591, for reasons stated in the previous office action.

In the previous office action, the Examiner argued that Groves discloses an adhesive comprising a mixture blend of an acid-modified vinylaromatic block copolymer (referring to column 2, lines 40-60, examples 1-7, column 10, lines 55-67 and column 11, lines 1-7).

The Examiner further contends that Groves discloses, in Examples 2-7, compositions that comprise metal chelates.

However, nothing in Groves teaches or suggests anything about a pressure-sensitive adhesive that is crosslinked with metal chelates.

Each of Examples 2-7 of the Groves reference pertains to a primer solution, and not to a pressure-sensitive adhesive. There is absolutely nothing to be found anywhere in Groves that would teach or suggest a pressure-sensitive adhesive comprising a metal chelate crosslinked acid-modified or acid anhydride modified vinylaromatic block copolymer.

It is noted that although the primer solutions of Examples 2-7 are formed of a blend of primer composition (1) and primer composition (2), and primer composition (1) includes an anhydride modified styrene-ethylene/butylene-styrene copolymer, the fact is that the Examples nevertheless pertain to a primer solution and nothing teaches or suggests a chelate-crosslinked pressure-sensitive adhesive strip.

Clearly, a primer is not a pressure-sensitive adhesive. Primers are not pressure-sensitive.

The Pressure Sensitive Adhesive of Groves' Example 19 specifically excludes any metal chelates. Note that the list of ingredients provided for Example 19 includes no metal chelates, and that although the composition formed by the ingredients listed in this table is said to have been blended with the polymer prepared according to Example 7, it is specifically stated at line 56 of Example 19, that the pressure sensitive adhesive composition of Example 7 was used without the metal chelate.

Although the blend disclosed in Example 24 of the Groves reference comprises the block copolymer solution of Example 1 (comprising an anhydride modified styrene-ethylene/butylene-styrene copolymer), it also comprises twice as much of the acrylate ester copolymer of Example 1 (30 g of the acrylate vs. 15 g of the SEBS copolymer). Those skilled in the art considering the composition of Example 24 know that metal chelates, especially with titanium, are well-known for crosslinking acrylates. Therefore, those skilled in the art reading Examples 1-7 of the Groves reference would understand that it is the acrylate component of the Examples that is being crosslinked, and not the

vinylaromatic block copolymer.

Further, Applicants' claims now specifically exclude acrylates from the pressure-sensitive adhesives.

It is not known, or suggested anywhere, that vinylaromatic block copolymers could be crosslinked with metal chelates. Therefore Examples 1-7 of the reference, all of which include an acrylate component, could not possibly lead those skilled in the art to the crosslinking of vinylaromatic block copolymers themselves with metal chelates.

Beyond the absence of any teaching or suggestion of a pressure-sensitive adhesive tape comprising a metal chelate crosslinked acid-modified or acid anhydride modified vinylaromatic block copolymer, there is nothing in Groves that would lead any person skilled in the art to any adhesive that could be detached by stretching in the direction of the bondline. Applicants have previously pointed out that the disclosure at column 8, lines 60-66 and column 9, lines 16 of Groves, referenced by the Examiner, has nothing to do with an adhesive that is detachable by extensive stretching. By contrast, that language concerns measuring the peel strength of an adhesive. This is completely different than and non-suggestive of the detachment of an adhesive by stretching in the direction of the bondline.

In response, the Examiner argues that

"it has been held that a chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure,

the properties applicant discloses and/or claims are necessarily present.” (referring to In re Spada)

The operative principle in the *Spada* decision is “...**the identical chemical structure...**” The Examiner has not alleged that Groves discloses “the identical chemical structure” as is recited in Applicants’ claims, only that Applicants’ adhesive is an obvious variation of what is disclosed. As explained above, Applicants’ composition is not an obvious variation of what is disclosed in Groves, as Groves’ adhesive is not chelate-crosslinked, and those compositions of Groves which do comprise a chelate are not adhesives, they are primers and also include acrylates, which those skilled in the art understand to be chelate crosslinkable.

Applicants’ adhesives, by contrast, are chelate-crosslinked and do not require acrylates for such chelate-crosslinking, as shown by Applicants’ Example 1.

No person skilled in the art reading Groves and TYZOR would ever be led to a metal chelate crosslinked acid modified or acid anhydride-modified vinylaromatic block copolymer pressure-sensitive adhesive that did not require the presence of acrylates in order to be chelate crosslinked.

No person reading Groves and TYZOR could ever be led to Applicants’ invention, and the rejection of claims 1-11 under 35 U.S.C. 103(a) as obvious over Groves US 5,623,010 in view of supporting evidence provided by TYZOR Technical Bulletin K-17591 should therefore now be withdrawn.

Claims 1-11 stand rejected under 35 U.S.C. 103(a) as obvious over 35 U.S.C. 103(a) as obvious over Groves US 5,623,010 in view of Graham US 4,005,247. The differences between Applicants' claims and anything that could be derived from the Groves reference are discussed above. The Examiner turns to the Graham reference for a teaching of an acrylic interpolymer that reacts with a metal chelate to form a crosslinked polymer matrix.

Here again, however, an acrylate, which is known to be crosslinkable with a chelate, is present. Nothing in Graham would teach or suggest that a composition comprising styrene block copolymer could be crosslinked with a metal chelate, without the necessity of an acrylate being present. No person reading Groves and Graham would ever be led to a metal chelate crosslinked acid modified or acid anhydride-modified vinylaromatic block copolymer pressure-sensitive adhesive that did not require the presence of acrylates in order to be acrylate crosslinked.

Accordingly, no combination of Groves and Graham could possibly render Applicants' claims obvious, and the rejection of claims 1-11 under 35 U.S.C. 103(a) as obvious over Groves US 5,623,010 in view of Graham US 4,005,247 should now be withdrawn.

In view of the present amendments and remarks it is believed that claims 1 - 11 are now in condition for allowance. Reconsideration of said claims by the Examiner is respectfully requested and the allowance thereof is courteously solicited.

CONDITIONAL PETITION FOR EXTENSION OF TIME

If any extension of time for this amendment is required, applicants request that this be considered a petition therefore. Please charge the required petition fee to Deposit Account No. 14-1263.

ADDITIONAL FEE

Please charge any insufficiency of fee or credit any excess to Deposit Account No. 14-1263.

Respectfully submitted
NORRIS, McLAUGHLIN & MARCUS

By /William C. Gerstenzang/
William C. Gerstenzang
Reg. No. 27,552

WCG:tmo
Enclosure: *Ex parte Parks*, 30 USPQ2d 1234

875 Third Avenue - 8th Floor
New York, New York 10022
(212) 808-0700

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30 USPQ2d 1234**Ex parte Parks****U.S. Patent and Trademark Office, Board of Patent Appeals and Interferences**

No. 93-2740

Decided September 2, 1993

Headnotes**PATENTS**

[1] Practice and procedure in Patent and Trademark Office -- Reissue -- Broader claims sought (► 110.1313)

Patentability/Validity -- Specification -- Written description (► 115.1103)

Claims in reissue application for method of determining nitrogen content of sample were improperly rejected on ground of inadequate descriptive support under 35 USC 112, first paragraph, since originally-filed disclosure need only convey, to one of skill in art, that applicant had possession of concept of what is claimed in order to satisfy description requirement, since lack of literal basis in disclosure for limitation that decomposition step of claims be "conducted in the absence of a catalyst" thus does not establish prima facie case for lack of descriptive support, and since it cannot be held that originally-filed disclosure would not have conveyed concept of effecting decomposition at elevated temperature in absence of catalyst.

[2] Practice and procedure in Patent and Trademark Office -- Reissue -- Broader claims sought (► 110.1313)

Claims in reissue application for method of determining nitrogen content of sample are overbroad under 35 USC 251, since application was filed more than two years after grant of original patent, since any claim which does not contain negative limitation expressly excluding presence of catalyst in decomposition step of method is broader than original claims, and since claims in question do not accomplish such exclusion by reciting phrase "consisting essentially of" in characterizing decomposition step.

Page 1235**Particular Patents****Particular patents -- Chemical -- Nitrogen detection**

4,018,562, Parks and Marietta, chemiluminescent nitrogen detection apparatus and method, claims 81-93 in application for reissue rejected.

Case History and Disposition**Page 1235**

Appeal from final rejection of claims in application for reissue of patent (Jill Johnston, primary examiner).

Application of Robert E. Parks and Robert L. Marietta, serial no. 708,810, filed May 31, 1991, continuation of serial no. 340,540, filed April 18, 1989 and abandoned, for reissue of patent no. 4,018,562, granted April 19, 1977 on application serial no. 625,510, filed Oct. 24, 1975 (chemiluminescent nitrogen detection apparatus and method). From final rejection of all claims in application, applicants appeal. Rejection of claims 1-10, 20-22, 55-80, and 94-106 reversed; rejection of claims 81-93 affirmed.

Judge

Before Calvert, vice chairman, and Steiner and Tarring, examiners-in-chief.

Opinion Text

Opinion By:

Steiner, examiner-in-chief.

This is an appeal from the final rejection of claims 1 through 10, 20 through 22 and 55 through 106, all the claims in this application for reissue of Patent No. 4,018,562 (the '562 patent).

THE INVENTION

The claimed invention is a method for determining the nitrogen content of a sample comprising manipulative steps which include decomposing the sample in an oxygen/inert gas atmosphere at an elevated temperature to obtain nitric oxide and causing the generated nitric acid to undergo a chemiluminescent reaction with ozone.

Claims 1, 81 and 94 are illustrative and read as follows:

1. The method for determining the total chemically combined nitrogen content of a sample comprising the steps:

a. decomposing said sample in one step in the presence of an oxygen-rich atmosphere of oxygen and an inert gas and at a temperature sufficiently above 700 degrees C. that substantially all of the chemically bound nitrogen is recovered as nitric oxide (NO), such decomposition being conducted in the absence of a catalyst,

b. causing the nitric oxide produced by such decomposition to undergo a chemiluminescent reaction with ozone, and

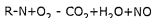
c. determining the magnitude of the chemiluminescent reaction to indicate the quantity of chemically combined nitrogen in said sample. 81. *A method for determining the total chemically combined nitrogen content of a sample, said method comprising the steps of: (a) decomposing said sample in one step, said decomposing step consisting essentially of decomposing said sample in the presence of an oxygen-rich atmosphere of oxygen and an inert gas and at a temperature sufficiently above 700 degrees C that substantially all of the chemically bound nitrogen is recovered as nitric acid (NO);*

(b) causing the nitric oxide produced by such decomposition to undergo a chemiluminescent reaction with ozone; and

(c) determining the magnitude of the chemiluminescent reaction to indicate the quantity of chemically combined nitrogen in said sample.

94. A method for determining the total chemically combined nitrogen content of a sample, said method comprising the steps of:

(a) decomposing said sample in one step in the presence of an oxygen-rich atmosphere of oxygen and an inert gas and at a temperature sufficiently above 700 degrees C that substantially all of the chemically bound nitrogen is recovered as nitric oxide (NO) according to the formula:



(b) causing the nitric oxide produced by such decomposition to undergo a chemiluminescent reaction with ozone; and

(c) determining the magnitude of the chemiluminescent reaction to indicate the quantity of chemically combined nitrogen in said sample.

THE REJECTIONS

Claims 1 through 10, 20 through 22 and 55 through 80 stand rejected under the first paragraph of 35 U.S.C. 112 for lack of adequate descriptive support. Claims 81 through 106 stand rejected under 35 U.S.C. 251 in that they are broader than the originally patented claims. ¹ In addition, all the

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appealed claims stand rejected under 35 U.S.C. 251 for lack of the requisite "error."

¹ The ultimate paragraph of 35 U.S.C. 251 reads as follows:

No reissued patent shall be granted enlarging the scope of the claims of the original patent unless applied for within two years from the grant of the original patent.

The rejection under the first paragraph of 35 U.S.C. 112, the rejection of claims 94 through 106 under 35 U.S.C. 251

as broader than the original claims, and the rejection of all the appealed claims under 35 U.S.C. 251 for lack of the requisite "error" are reversed; the rejection of claims 81 through 93 under 35 U.S.C. 251 as broader than the original claims is affirmed.

The Rejection of Claims 1 through 10, 20 through 22 and 55 through 80 under the first paragraph of 35 U.S.C. 112. The initial burden of establishing a *prima facie* basis to deny patentability to a claimed invention on any ground is always upon the examiner. *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed.Cir. 1992). In rejecting a claim under the first paragraph of 35 U.S.C. 112 for lack of adequate descriptive support, it is incumbent upon the examiner to establish that the originally-filed disclosure would not have reasonably conveyed to one having ordinary skill in the art that an appellant had possession of the now claimed subject matter. *Wang Laboratories, Inc. v. Toshiba Corp.*, 993 F.2d 858, 26 USPQ2d 1767 (Fed.Cir. 1993). Adequate description under the first paragraph of 35 U.S.C. 112 does not require *literal* support for the claimed invention. *In re Herschler*, 591 F.2d 693, 200 USPQ 711 (CCPA 1979); *In re Edwards*, 568 F.2d 1349, 196 USPQ 465 (CCPA 1978); *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976). Rather, it is sufficient if the originally-filed disclosure would have conveyed to one having ordinary skill in the art that an appellant had possession of the concept of what is claimed. *In re Anderson*, 471 F.2d 1237, 176 USPQ 331 (CCPA 1973).

[1] The examiner contends that the rejected claims lack adequate descriptive support because there is "no literal basis for the" ² claim limitation "in the absence of a catalyst." Clearly, the observation of a lack of literal support does not, in and of itself, establish a *prima facie* case for lack of adequate descriptive support under the first paragraph of 35 U.S.C. 112. *In re Herschler*, *supra*; *In re Edwards*, *supra*; *In re Wertheim*, *supra*.

² See page 4 of the Answer, second full paragraph, line 4, and page 7 thereof, last two lines.

The examiner notes that in *Parks v. Fine*, 773 F.2d 1577, 227 USPQ 432 (Fed.Cir. 1985), involving the claimed subject matter, the limitation "in the absence of a catalyst" was considered material. Suffice it to say, no issue under the first paragraph of 35 U.S.C. 112 for lack of adequate descriptive support for the limitation "in the absence of a catalyst" was before the court.

We are not unmindful of the decision in *Ex parte Grasselli*, 231 USPQ 393 (Bd.App. 1983) *aff'd* mem., 738 F.2d 453 (Fed.Cir. 1984), which involved claims to a process for the ammoxidation of propane or isobutane employing a catalyst "free of uranium and the combination of vanadium and phosphorus." Under the particular facts in that case, it was held that the negative limitation introduced new concepts in violation of the description requirement of the first paragraph of 35 U.S.C. 112, citing *In re Anderson*, *supra*. In the situation before us, ³ it cannot be said that the originally-filed disclosure would not have conveyed to one having ordinary skill in the art that appellants had possession of the concept of conducting the decomposition step generating nitric acid in the absence of a catalyst. See, for example, column 5 of the '562 patent, first paragraph, wherein FIG. 4 is discussed. Pyrolysis temperatures of between 600 degrees C and 700 degrees C, and above 700 degrees C were employed to achieve conversion of chemically bound nitrogen to nitric oxide. Smooth conversion was obtained above 700 degrees C, while the optimum conversion was found to occur above 900 degrees C. Throughout the discussion which would seem to cry out for a catalyst if one were used, no mention is made of a catalyst. ⁴

³ Whether the requirement for an adequate written description has been met is a question of fact and, hence, driven by the exigencies of each case. *Wang Laboratories, Inc. v. Toshiba Corp.*, 993 F.2d 858, 26 USPQ2d 1767 (Fed.Cir. 1993).

⁴ A "catalyst" normally functions to accelerate a particular reaction. See for example, Hawley, *Condensed Chemical Dictionary*, Tenth Edition, 1981, pp. 205 and 206, copies of which are enclosed for appellants' convenience and made of record.

Moreover, according to two declarations by Wentworth, a professor of chemistry at the University of Houston, whose expertise in this particular art has not been challenged, one having ordinary skill in the art would have recognized that the reaction generating nitric oxide, according to the equation disclosed in the '562 patent, is conducted without a catalyst. See *Vas-Cath, Inc. v. Mahurkar*, 935 F.2d 1555, 19 USPQ2d 1111

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(Fed.Cir. 1991); *In re Lemin*, 364 F.2d 864, 150 USPQ 546 (CCPA 1966). Thus, it cannot be said that the originally-filed disclosure would not have conveyed to one having ordinary skill in the art the concept of effecting decomposition at an elevated temperature in the absence of a catalyst. *In re Anderson*, *supra*.

Accordingly, the examiner's rejection of claims 1 through 10, 20 through 22 and 55 through 80 under the first paragraph of 35 U.S.C. 112 for lack of adequate descriptive support is reversed.

The Rejection of Claims 81 through 106 under 35 U.S.C. 251 as Broader than the Original Claims.

We initially observe that on page 6 of the Brief,

appellants agree that any claim in the reissue application that does not contain a limitation that *means* "in the absence of a catalyst" is broader than original claims 1-10 and hence unpatentable under 35 USC 251 (appellants' emphasis).

Claims 81 through 106 do not contain a negative limitation which expressly precludes the presence of a catalyst. However, appellants contend that claims 81 through 93 exclude the presence of a catalyst by virtue of the phrase "consisting essentially of" in characterizing the decomposition step, and that claims 94 through 106 exclude the presence of a catalyst by virtue of the recited equation for the decomposition reaction, which equation does not reflect the presence of a catalyst.

[2] In our opinion, the phrase "consisting essentially of," as employed in claims 81 through 93, limits decomposition to a single step and, in that sense, is redundant since decomposition is performed "in one step." However, it is not apparent and appellants have not explained why the expression "consisting essentially of" excludes the presence of a catalyst during the recited decomposition step.⁵ It would, therefore, appear that claims 81 through 93 are broader than original claims 1 through 10 and, hence, were properly rejected by the examiner under 35 U.S.C. 251. Accordingly, the examiner's rejection of claims 81 through 93 under 35 U.S.C. 251 is *affirmed*.

⁵ Compare *Moleculon Research Corp. v. CBS, Inc.*, 793 F.2d 1261, 229 USPQ 805, 812, note 6 (Fed.Cir. 1986).

Claims 94 through 106 recite the decomposition reaction in a manner which, according to the Wentworth declarations, means that no catalyst was employed. *In re Lemin, supra*. Accordingly, claims 94 through 106 would not appear broader than original claims 1 through 10 and, hence, the examiner's rejection of claims 94 through 106 under 35 U.S.C. 251 is *reversed*.

The Rejection of the Appealed Claims Under 35 U.S.C. 251 for Lack of the Requisite Error.

This rejection is *reversed* essentially for the reasons advocated by appellants on appeal. We emphasize that the practice of submitting claims as a hedge against the possible invalidity of original claims has been judicially sanctioned. See, for example, *Hewlett-Packard Co. v. Bausch & Lomb, Inc.*, 882 F.2d 1556, 11 USPQ2d 1750 (Fed.Cir. 1989); *In re Altenpohl*, 500 F.2d 1151, 183 USPQ 38 (CCPA 1974); *In re Handel*, 312 F.2d 943, 136 USPQ 460 (CCPA 1963).

In summary, the examiner's rejection of claims 81 through 93 is *affirmed*; the rejection of claims 1 through 10, 20 through 22, 55 through 80 and 94 through 106 is *reversed*.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR 1.136 (a). See the final rule notice, 54 F.R. 29548 (July 13, 1989), 1105 O.G. 5 (August 1, 1989).

AFFIRMED-IN-PART.

- End of Case -

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